

ABSTRACT OF THE DISCLOSURE

The method and apparatus uses pulse-width-modulation to drive display elements, such as light emitting diodes, within an active matrix display. At least one of the shift cycles is a sub-pulse-width-modulation cycle in which the display is disabled for a fraction of the shift cycle. This provides an increased number of possible display colors for the display elements. Additionally, the display can be disabled for some portion of the remaining shift cycles in order to provide a dimming of the display without losing color resolution.